

Drilling and Completion Fluid Technology

ANTON provide Drilling and Completion fluids services in various drilling environments for clients around the world, focusing on Horizontal Well, Ultra-deep Well, HT Well and Complex Well. With the ability of independent research and development, characterized by biosynthetic, oil-based and high-temperature water base drilling and completion fluids technologies, committing application of new techniques and processes. The main business covers four service modes: Integrated Drilling and Completion Service, Engineer Technical Consultancy Service, Material Sales and Mud Station Services.

Service Scope:

- Biosynthetic Base Environmental Friendly Drilling Fluid System - **Ant-Druid**
 - The base oil is modified from natural plant oil, no aromatic hydrocarbons, non-toxic, non-fluorescent, biodegradable and enhance ROP;
 - Applied in shale gas well, ERW and ultra-horizontal displacement well.
- High Temperature Resistance Oil Base Drilling Fluid System - **Lava FlowAT**
 - Resisting temperature more than 200°C, density ranged from 0.95 to 2.63 g/cm³, powerful ability to resist brine and gypsum contamination, with low cost advantage;
 - Supporting oil base completion fluid, there is no weighting agent sag in static condition at 200°C for 10-15 days;
 - Suitable for strong water sensitive deep well, ultra-deep well and shale gas well.
- Resisting High Temperature and Salt Contamination High Density Environmental Friendly Water Base Drilling Fluid System - **Extreme Flow**
 - Resisting high temperature polymer be used, the system resists temperature more than 180°C, MW approaching 2.50g/cm³, drilling fluid properties are stable in long period;
 - Suitable for high temperature and high MW well, ultra-deep well, with long segment salt and gypsum well.
- Multiple Collaborative Drilling Fluid Systems
 - Suitable for water sensitive, collapse, sloughing and high requirement for inhibition trouble formation.
- Organic Salt Drilling Fluid System/Amido-Organic Salt Drilling Fluid System
 - With strong inhibiting and resisting contamination abilities, and formation damage control effectively;
 - Suitable for deep, directional, horizontal and slim hole well drilling, used as reservoir drilling in and completion fluid usually.

Technical Achievement:

Invention patent for emulsifier of oil base drilling fluid and biosynthetic drilling fluid system.

Service Performance:

- Applied EP Bio-base Mud – Ant-Druid to horizontal well of shale gas (horizontal section 1,500 – 2,000m) in one trip at Sichuan, China;
- Applied Anti-HT Oil-base Mud to the first highly deviated well (73.78°, MD: 7,042m) and 80 wells at Keshen Block, Tarim Oilfields;
- Applied Amido OS Mud to 20 wells at Chad; and
- Applied multiple synergistic mud to 120 wells at China, Ethiopia.